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Claims

 A method for creating extendable object-oriented code comprising: defining a data-type to include a base class and an additional properties portion;

defining the base class in terms of known properties; and reserving the additional properties portion for a future modification to the data-type.

- 2. The method of claim 1, wherein the base class includes properties that are capable of being understood by a plurality of interconnected devices.
- 3. The method of claim 2, further comprising creating a new data-type by using an existing base class; and adding a new attribute to the additional properties portion.
- 4. The method of claim 3, wherein the additional properties portion comprises a name-value pair.
- 5. The method of claim 2, further comprising defining the data-type to include a type identifier that provides a unique identification for a data-type.
- 6. The method of claim 5, wherein the base class can be determined from the type identifier by using a catalog that is maintained in each of the plurality of interconnected devices.
- 7. The method of claim 6, wherein the method is implemented on a computer system in a Java programming language.
- 8. A method for creating an extendable class-based shared data-type for use in object oriented programming comprising:

creating a first data-type comprising a first base class that includes initial properties; and

creating a second data-type comprising:

the first base class; and

a second additional properties portion having a new attribute.

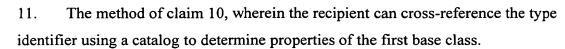
- 9. The method of claim 8, wherein the first data-type further comprises a type identifier that provides information about the first base class.
- 10. The method of claim 9, wherein the information is unique to the data-type and can be used by a recipient to determine the properties of the data-type.

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- 12. The method of claim 8, wherein the first data-type further comprises a first additional properties portion.
- 13. The method of claim 8, wherein the new attribute is a name-value pair.
- 14. A software system comprising:
 - a storage medium; and
- a software program stored on the storage medium for creating an extendable object-oriented data-type, wherein the data-type as comprises:
 - a base class that defines base characteristics of the data-type; and an additional properties portion.
- 15. The software system of claim 14, wherein the data-type further comprises a type identifier.
- 16. The software system of claim 15, wherein the type identifier is unique to the data-type and provides information regarding the data-type.
- 17. The software system of claim 16, wherein the type identifier can be cross-referenced using a catalog to determine known characteristics of the data-type.
- 18. The software system of claim 17, wherein the additional properties portion is capable of holding a new attribute having a name-value pair.
- 19. The software system of claim 18, wherein the base class is known to a plurality of interconnected devices on which the software system is used.
- 20. The software system of claim 19, wherein the new attribute may not be known to at least one of the plurality of interconnected devices.